Opening Statement: These page changes will be formally released in October 2006.

c. Command the azimuth position to 180º by entering **180** in the Requested Position field of the Azimuth area of the Pedestal Control window. Then click **Go**.

d. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **OFF**.

2. At the rear of UD90 cabinet, locate the Pedestal Power Amplifier 90A14 at the bottom of rack. Remove cable W1 from 90A14J3 (azimuth and elevation motor drives).

3. At the front of the DCU, remove the screws along each side using a Phillips screwdriver. Set screws aside.

CAUTION

Unit is heavy. Do not attempt to force unit beyond slide stops.

4. Pull slide-mounted DCU Drawer 90A13 forward until slide stops engage.

5. Remove screws securing top cover with proper screwdriver and remove cover.

6. At the RDA Maintenance Panel UD90A2, set the Pedestal Electronics Power switch to **ON**.

NOTES

90A13A1J12 referenced in the following steps is the empty 40 pin chip socket located in the center of the Analog Board.

In the following steps, STS may display position feedback errors due to cable W1 being disconnected from 90A14J3.

7. Command azimuth position as follows:

a. Type **130** in the Requested Position field of the Azimuth area of the Pedestal Control window.

b. Click **Go**.

8. Using a Fluke 87 III or equivalent digital multimeter, measure the voltage from 90A13A1J12-30 to 90A13A1J12-37 (Signal Ground).

9. Adjust UD90A13A1R6 (AZ Offset) so that the reading is -10.00 ±.01 VDC.

10. Type **230** in the Requested Position field of the Azimuth area of the Pedestal

`Control` window. Click **Go**.

NOTE

In the following steps, STS may display position feedback errors due to cable W1 being disconnected from 90A14J3.

11. With the digital multimeter connected between 90A13A1J12-30 and J12-37 (Signal Ground), adjust 90A13A1R5 (AZ Gain) so that the reading is +10.00 ±.01 VDC.

12. At the `Pedestal Control` window, command the azimuth position to 180º.

13. With the digital multimeter connected between 90A13A1J12-30 and J12-37, adjust 90A13A1R6 (AZ Offset) so that the reading is 0.00 ±.01 VDC.

NOTE

To prevent the display of errors on the HCI, close out of the `Pedestal Control` window prior to turning the Pedestal Electronics Power switch to OFF.

14. When the adjustments are complete, at the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **OFF**.

15. At the rear of the UD90 cabinet, reconnect cable W1 to 90A14J3.

16. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **ON**.

17. Continue with next paragraph to check/adjust the Elevation D/A Converter.

6.5.20.3.2 ELEVATION D/A CONVERTER ADJUSTMENT.

WARNING

High voltages are present in or near this equipment when energized. Death on contact may result if personnel fail to observe proper safety procedures.

1. At the RDA HCI open the `Pedestal Control` window, if not done previously, and set up STS to command the antenna to move in elevation by entering the following:

Step	Operator Action	System Response/Comments
a.	Click on **System Test Software**, and **Yes** on the `Confirm Maintenance Mode` window.	The `System Test Software` window is displayed.
b.	On the menu bar, click on **Control**	A drop down menu is displayed.
c.	Click on **Pedestal Control**.	The `Pedestal Control` window is displayed.
d.	Type **50.0** in the Requested Position field of the `Elevation` area.	
e.	Click on **Go**.	The antenna is commanded to the requested position.

2. When the antenna reaches a position of 50.0 degrees, set the Pedestal Electronics Power switch at the RDA Maintenance Panel 90A2 to **OFF**.

3. At the rear of UD90 cabinet, locate the Pedestal Power Amplifier 90A14 at the bottom of rack. Remove cable W1 from 90A14J3 (azimuth and elevation motor drives).

4. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **ON**.

5. At the `Pedestal Control` window, repeat the steps 1.d. and 1.e. to request elevation position of **0.0** degrees.

NOTES

90A13A1J12 referenced in the following steps is the empty 40 pin chip socket located in the center of the Analog Board.

In the following steps, STS may display position feedback errors due to cable W1 from 90A14J3 being disconnected.

6. Using a Fluke 87 III or equivalent digital multimeter, measure the voltage from 90A13A1J12-29 to 90A13A1J12-37 (Signal Ground).

7. Adjust 90A13A1R8 (EL Offset) so that the reading is -10.00 ±.01 VDC.

8. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **OFF**.

9. At the rear of the UD90 cabinet, reconnect cable W1 to 90A14J3.

10. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **ON**.

11. Repeat steps 1.d. and 1.e. to command EL position to 0.0 degrees.

12. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **OFF**.

13. At the rear of the UD90 cabinet, disconnect cable W1 from 90A14J3.

14. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **ON**.

15. Repeat steps 1.d. and 1.e. to command EL position to 50.0 degrees.

NOTE

In the following steps, STS may display position feedback errors due to cable W1 being disconnected. Disregard these error messages.

16. With the digital multimeter connected between 90A13A1J12-29 and J12-37 (Signal Ground), adjust 90A13A1R7 (EL Gain) so that the reading is +10.00 ±.01 VDC.

17. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **OFF**.

18. At the rear of the UD90 cabinet, reconnect cable W1 to 90A14J3.

19. At the RDA Maintenance Panel 90A2, set the Pedestal Electronics Power switch to **ON**.

20. Repeat steps 1.d. and 1.e. to command EL position to 0.0 degrees.

21. Adjust 90A13A1R8 (EL Offset) slightly if the elevation position is not within 0 ± 0.04 degrees as viewed on the HCI, in the `Elevation Actual Position` box. To update the Pedestal Values, at the RDA HCI, repeat the appropriate substeps of step 1 to request EL position to 0.0 degrees.

22. At the RDA HCI, repeat steps 1.d. and 1.e. to command EL position to +5.0 degrees.

23. Adjust 90A13A1R8 (EL Offset) so that the antenna position is +5.00 ±0.04 degrees as viewed on the HCI, in the `Elevation Actual Position` box. To update the Pedestal Values, at the RDA HCI, repeat the substeps 1.d. and 1.e. to request EL position to +5.0 degrees

24. Continue with commanding elevation position between 0 and +5.00 degrees and adjusting 90A13A1R8 (EL Offset) until the best compromise is reached between reported positions of 0.00 and +5.00 degrees elevation.